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Analysis of Residential Rehabilitation Need and Activity in Ontario

Ontario Renews: background paper

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Analysis of Residential Rehabilitation Need and Activity in Ontario

R. Stocking

Ministry of Housing
Policy and Program Development
Secretariat

April, 1978

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TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION	1
II. SUMMARY OF FINDINGS	3
III. METHODOLOGY	8
IV. REHABILITATION NEED	11
V. DWELLING STOCK BEYOND REPAIR	26
VI. REHABILITATION ACTIVITY	28

Appendix I: Development and Implementation of
a Small Size Sample Survey.

Section I - Survey Details

Section II - Estimation Procedure

Appendix II: Background Data.

SECTION I

INTRODUCTION

Study Objectives

The objectives of this study are as follows:

- Determination of the need for rehabilitation of the existing dwelling stock by tenure according to the five economic regions and the total Province of Ontario and by selected municipality cohorts based on population size.
- Estimation of the amount of existing housing stock beyond repair by tenure for a similar geographical and municipality breakdown.
- Examination of the current volume of rehabilitation activity at the regional and Provincial level.

Data Sources and Definitions

Due to the inadequacy of existing data on dwelling stock in need of repair, primary field research was carried out in order to generate new data. This was accomplished through a small sample telephone survey of municipalities (see Section III for a complete explanation). Thus, the aggregate data used in this study were derived from estimates by technical and/or administrative staff in the local municipalities, concerning the extent of rehabilitation need and activity within their municipality (for technical details on the estimation procedure see Appendix I. Section II).

In order to produce as much uniformity as possible in the data, the definitions of the variables used in the study, as described below, were explained to each municipality surveyed.

Rehabilitation Need

The term 'rehabilitation need' is taken to cover dwelling units which have inadequate facilities, have been allowed to fall into disrepair, or are partially obsolescent, in, for example wiring or plumbing.

Rehabilitation Completions

Since it is difficult to determine when rehabilitation work is completed, the estimation of publicly assisted rehabbed units was based on funding approved and received.

In the case of rehabilitation carried out solely by private sector financing, the municipalities stated that estimates could only be determined through building permit issuances. Since these only cover structural repairs, it is possible that the estimates provided were on the conservative side.

Units Beyond Repair

Units beyond repair are those units that have been condemned, and are waiting for demolition, i.e., the state of disrepair is such that rehabilitation is either impossible and/or uneconomical.

SECTION II

Summary of Findings

A. Rehabilitation Need

- As of December 31, 1977, 657,000 dwelling units in Ontario were estimated to be in need of some repair, representing 23.8 percent of the total dwelling stock.
- The Central Region had the lowest proportion of its dwelling stock in need of repair, and the North-Eastern Region the highest, while the South-Western Region also showed a surprisingly high proportion of rehabilitation need.
- The condition of rental stock was significantly better than the ownership stock in all the regions except the Central Region. The largest differences between the state of owned and rental stock occurred in the Eastern and North-Eastern Regions.
- Municipalities with under 3,000 population showed a significantly greater proportion of their total dwelling stock in need of rehabilitation, compared to all other municipalities. This was entirely due to the large size of the ownership sector.
- Approximately 79 percent of the total dwelling stock in Ontario requiring repair, was estimated as having inadequate insulation. A surprising observation was that the North-Western Region's insulation need was estimated to be well below the provincial level.

- The level of rehabilitation need for housing stock owned by low income households eligible for government assistance was seen to be decreasing over time, mainly due to the implementation of the Ontario Home Renewal Program (O.H.R.P.).

B. Units Beyond Repair

- It was estimated that as of December 31, 1977 1.9 percent of Ontario's total dwelling stock needed demolition.
- The North-Eastern Region was the only region whose demolition need was substantially above the provincial level.
- In all the regions, the percentage of total rental stock that was beyond repair was lower than that for total ownership stock.
- No significant differences were recorded in the estimation of units beyond repair, for selected municipality strata based on population size.

C. Rehabilitation Activity

- The level of rehabilitation activity during 1977 in Ontario was estimated at 3.5 percent of the province's total dwelling stock in need of repair as of December 31, 1977.

- Taken as a percent of total rehabilitation need, there was a relative lack of repair activity during 1977 in Central Region compared to the other regions.
- There were no significant differences in the level of rehabilitation activity during 1977, among the different municipalities according to their population size.

D. Regional Summary

Table II.1 below gives an overall impression of the relative state of rehabilitation need and activity by the end of 1977 within each region compared to the total province.

TABLE II. 1

A Regional Comparison of Rehabilitation
Need and Activity as of December 31, 1977

Variable	Ontario	South Western Region	Central Region	Eastern Region	North Eastern Region	North Western Region
	<u>Percent</u>					
Units Needing Repair as a % of Total Stock	23.8	↑	↓	↑	↑	↓
Units Beyond Repair as a % of Total Stock	1.9	↓	↔	↓	↑	↑
Rehabilitation Activity in 1977 as a % of Total Need	3.5	↑	↓	↑	↑	↑

Symbols: ↑ Above provincial figure ↔ Same as provincial figure
 ↓ Below provincial figure

Source: Estimates prepared by P.P.D.S.,
Ministry of Housing.

Table II.2 provides the absolute numbers of existing dwelling units in need of repair and beyond repair by region and tenure as of December 31, 1977.

For additional detailed tables on rehabilitation need and activity, see Appendix II.

TABLE II.2

REHABILITATION NEED BY TENURE AND REGION AS OF DECEMBER 31, 1977

Region	Total Dwelling Stock	Rehabilitation Need		Units Beyond Repair	
		Units	Percent of Total	Units	Percent of Total
Southwestern					
- Ownership	297,924	77,971	26.2	4,664	1.6
- Rental	123,245	28,589	23.2	902	0.7
- Total	421,169	106,560	25.3	5,566	1.3
Central					
- Ownership	1,069,172	247,627	23.2	22,355	2.1
- Rental	635,072	145,577	22.9	10,676	1.7
- Total	1,704,244	393,204	23.1	33,031	1.9
Eastern					
- Ownership	236,392	63,454	26.8	4,271	1.8
- Rental	150,849	30,758	20.4	1,546	1.0
- Total	387,241	94,212	24.3	5,817	1.5
Northeastern					
- Ownership	123,868	33,972	27.4	3,946	3.2
- Rental	55,603	11,992	21.6	1,630	2.9
- Total	179,471	45,964	25.6	5,575	3.1
Northwestern					
- Ownership	53,414	12,810	24.0	1,224	2.3
- Rental	19,775	4,190	21.2	354	1.8
- Total	73,199	17,000	23.2	1,578	2.2
Total Ontario					
- Ownership	1,780,770	435,835	24.5	36,460	2.1
- Rental	984,544	221,105	22.5	15,106	1.5
- Total	2,765,314	656,940	23.8	51,566	1.9

SECTION III

Methodology

There were three distinct stages in the development of the data used in this study.

A. Investigation of Secondary Source Data

- The 1961 Census is the latest available comprehensive secondary source for data on the general condition of housing stock.
- C.M.H.C's 1974 Survey of Housing Units provides data on exterior condition of dwelling stock only in the nine census metropolitan areas. Hence, conclusions could only be drawn in respect to the urbanized core areas.
- The Ontario Home Renewal Program (O.H.R.P.) applications are a useful source of data on the overall condition of dwelling stock. However, their major limitations are that they do not provide a breakdown between ownership and rental stock and they do not give a uniform coverage of the province. Thus the OHRP data do not constitute a representative sample of the province.

B. Development and Implementation of a Small Sized Sample Survey of Municipalities.

Given the inadequacy of all known sources of secondary data on housing stock condition, it was decided to undertake a sample survey of municipalities to obtain the required information. A small sized sampling estimation procedure was developed by Tom Garrison (Statistician, Policy and Program Development Secretariat, Ministry of Housing) which produced a significant improvement in the sample's reliability, over general purpose sampling procedures.

It was determined that comparable data for an additional 95 municipalities was required to supplement the O.H.R.P. data available at the time of the survey. The geographical and population-sized dispersions for these municipalities were selected by the statistical method used. As a result, the precision of the final sample was increased by 88 percent at the provincial level and between 40 percent (North-West Region) to 90 percent (Central Region) at the regional level, compared to the unsupplemented O.H.R.P. data. Details of the sample survey are provided in Appendix I - Section I.

C. Conversion of the Sample Data to Estimations
for the Total 'Population'.

The technical details of this conversion process are given in Appendix I - Section II. It should be pointed out here that the estimates obtained are based upon the opinion of the municipalities with regard to the condition of their housing stock. The derived data do not reflect any sample enumeration of the condition of the housing stock, such as was conducted in C.M.H.C's 1974 Survey of Housing Units.

The advantages of the estimation procedure used are as follows:

- It permits a small sample to be used, which is valuable in the case of limited resources. In addition it enables a small modified random sample to be combined with existing information.
- It reduces the standard error of the estimates to a minimum.
- It indicates the level of reliability and the degree of significance of the data set.

IV. Rehabilitation Need

A. Total Dwelling Stock

As of December 31, 1977, approximately 657,000 dwelling units in Ontario were estimated to be in need of some repair, representing nearly 24 percent of the total dwelling stock.

A broad comparison can be made with the 1961 Census which also indicated that about 24 percent of the total stock was in need of repair.

At the regional level, the data reflects two characteristics that are in contrast to intuitive reasoning. The first is the above average percent of total stock in need of repair in the Southwestern Region. This suggests that there has been an increasing deterioration of dwelling stock in the medium sized rural towns that predominate in the Southwest.

The second characteristic is the below average rehabilitation need existing in the Northwestern Region. This can be explained by the relatively good condition of existing stock in the two major urban areas, Thunder Bay and Kenora, whose combined total stock constitute approximately 52 percent of the region's housing stock.

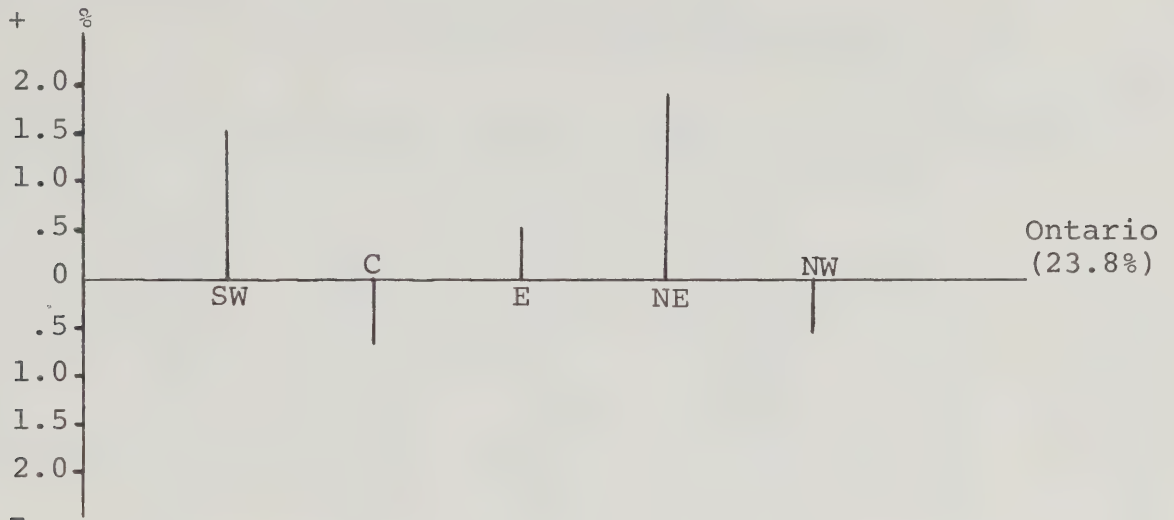
Predictably, the Central Region has the lowest proportion of its dwelling stock in need of repair. This can be attributed to the region's high production rate of housing stock within the past decade.

In contrast, the North-Eastern Region has the highest rehabilitation need in percentage terms, mainly due to its significant proportion of mining oriented towns that in the past have not paid attention to the importance of adequate building standards.

Finally, the percentage of Eastern Region housing stock requiring repair is only marginally above the provincial percentage. These features are illustrated in Chart IV.1 below, in which the zero horizontal line represents the provincial rehabilitation need of 23.8 percent of total existing dwelling stock.

Percentage of Total Dwelling Stock
In Need of Repair
As of December 31, 1977

Regional variation from
the Provincial Level

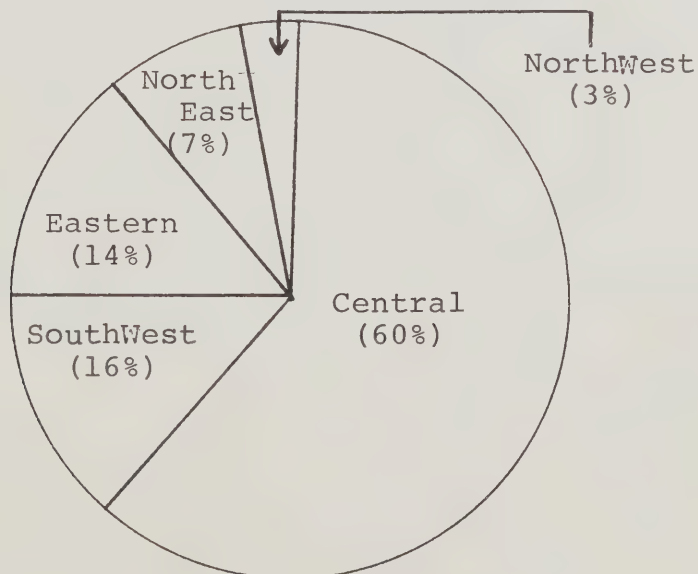


Source: Estimates - P.P.D.S., Ministry of Housing
(Data provided in Appendix II, Table 1).

As can be seen from chart IV.2 below, in terms of percentage of total Provincial stock requiring rehabilitation, the Central Region completely overshadows the other regions, with the South-Western Region containing the next highest proportion.

CHART IV.2

Regional Proportions of Total Units
Requiring Repair in Ontario as of December 31, 1977



Source: Estimated by P.P.D.S., Ministry of Housing (Data provided in Appendix II, Table I).

B. Tenure Breakdown

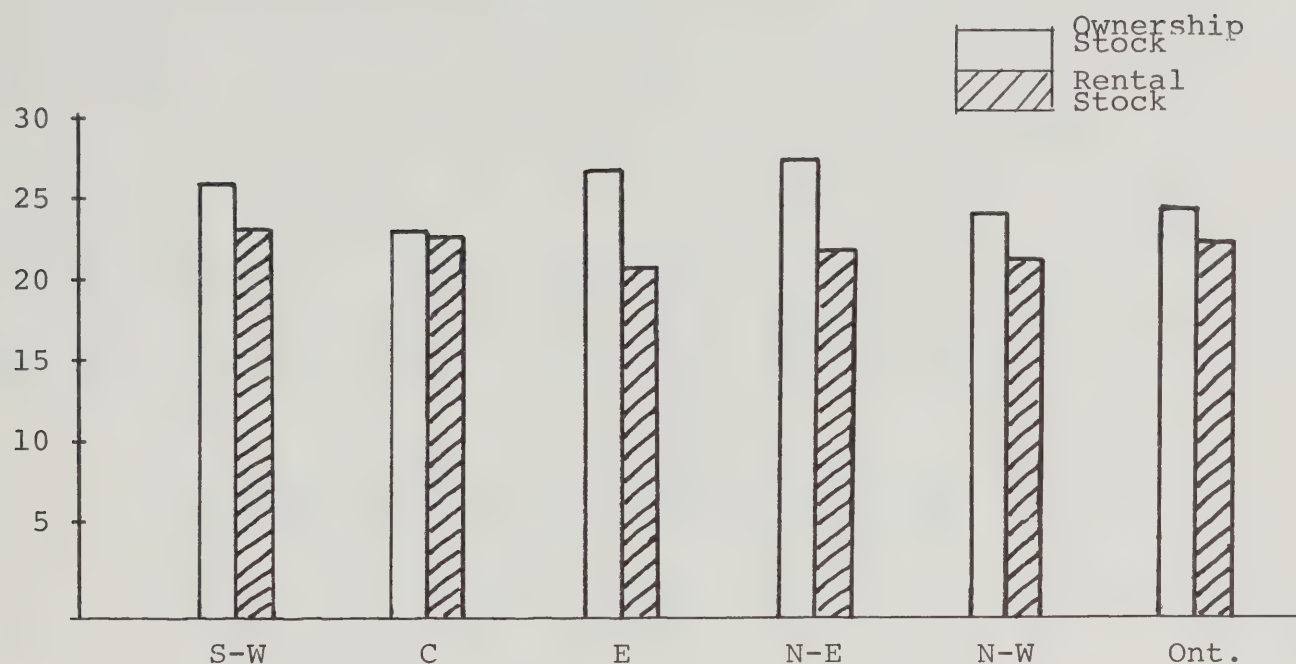
The percentage of total ownership stock in Ontario at the end of 1977 needing repair was estimated at 24.5 percent. This was 2 percent higher than the estimation for rental stock. This difference can be explained by the lower age structure of rental stock and the existence of more stringent building standards governing rental construction.

The condition of rental stock was significantly better than the ownership stock in all the planning regions except Central Region, with the largest differences occurring in the Eastern Region and the Northeastern Region, as shown in Chart IV.3 below.

CHART IV.3

Percentage of Dwelling Stock Requiring
Rehabilitation by Tenure and Planning Region

As of December 31, 1977

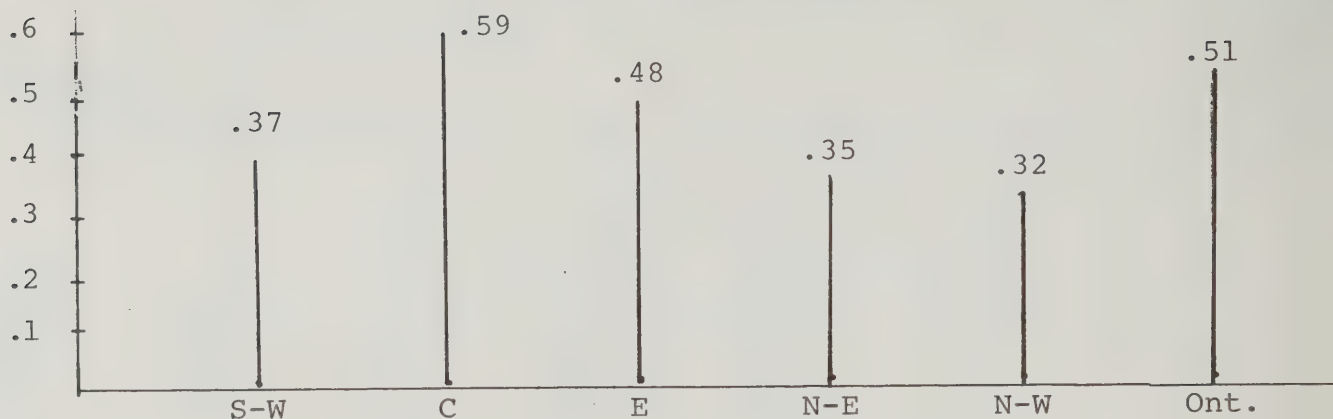


Source: Estimated by P.P.D.S., Ministry of Housing (Complete data shown in Table II.2)

With reference to tenure, the ratio of total rental to ownership units requiring repair was approximately .5 in all Ontario. At the regional level this ratio was even lower in all regions, with the exception of Central Region, mainly due to its higher proportion of rental stock. These characteristics are illustrated in the chart IV.4 below.

Chart IV.4

Ratio of Rental to Ownership Units
Requiring Repair by Regions
and Total Ontario



Source: Estimates prepared by P.P.D.S., Ministry of Housing (Complete data shown in Appendix II Table II)

Although the Central Region contained a major proportion of total ownership stock requiring repair as of the end of 1977, its share of total rental rehabilitation need was even larger, as illustrated in chart IV.5 below

Chart IV.5

Rehabilitation Need by Tenure and Region



Source: Estimates prepared by P.P.D.S., M.O.H.

C. Population-Size Cohorts

The data for the four population-size cohorts were calculated as a percentage of total units requiring repair within each cohort. The results are tabulated in Table IV.1 below. The municipalities in the under 3,000 population cohort were significantly different from the other cohorts, and this significance was entirely due to the large difference in the ownership sector. Thus these results definitely support the hypothesis that the major rehabilitation requirement in terms of relative magnitude is to be found in the very small local municipalities.

TABLE IV.1

Percentage of Units needing repair by type
of Tenure according to population sized cohorts
as of the end of 1977 for all Ontario.

Population-sized Cohorts	Total Stock %	Rental Stock %	Ownership Stock %
< 3,000	34	21	35
3,000- 9,999	18	15	19
10,000-49,999	21	19	21
50,000+	20	18	20

Source: Estimates prepared by P.P.D.S.,
Ministry of Housing.

D. Insulation Need

Three major observations can be made from the estimations calculated on the need for insulation in the existing housing stock.

- The overall level of need is high, with 79 percent of the total provincial stock requiring repair, estimated as having inadequate insulation.
- While a high proportion of insulation need may be anticipated in the North Eastern Region, it was unexpected to find such a large proportion (85 percent) in the Central Region. A possible explanation may be the more rigorous building standards imposed by the larger sized municipalities in the region.

- The North Western region was estimated to have an insulation need well below the provincial level. It appears unusual that there is such a large difference in insulation requirements between the two northern regions.

These Characteristics are tabulated in Table IV.2.

TABLE IV.2

Percent of Total Stock Needing Repair, with
Insulation Requirements in Ontario
as of December 31, 1977

	Total Units Needing Repair (1)	Units Needing Insulation (2)	(2) % (1)
South Western	106,560	80,626	76
Central	393,204	334,747	85
Eastern	94,212	59,578	63
North Eastern	45,964	38,651	84
North Western	17,000	5,992	35
Ontario	656,940	519,594	79

Source: Estimates prepared by P.P.D.S.,
Ministry of Housing.

Note: Due to the non-availability of information from a number of municipalities in Central Region, its estimate has a low reliability.

E. Summary of Ontario Home Renewal Program Activity

Based on a 1976 survey of O.H.R.P. municipalities it was estimated that, in the total ownership stock whose households were eligible for O.H.R.P. funding, the total rehabilitation need was approximately 100,000 units. Assuming this estimation as of December 31, 1977, it represented about 23 percent of total estimated ownership rehabilitation need in the province.

Using these estimates of rehabilitation activity, it was calculated that 7,200 units were rehabilitated through direct provincial government funding during 1977. Given an average cost per unit estimate of \$3,250 which was determined by the Community Renewal Branch, the amount of provincial government funding allocation in 1977 was approximately 23.4 million. This level of rehabilitation activity represented about 31 percent of the estimated total rehabilitation activity in 1977 (note: a breakdown by tenure was not available).

The obvious deduction from these related data on estimated rehabilitation need for households eligible for government assistance and actual funding, is that this segment of rehabilitation need is definitely being reduced over time through the action of O.H.R.P.

It is difficult to make any quantitative estimates of total financial costs for the remaining 69 percent of total owner rehabilitation activity. This proportion is represented by owner occupied households that have sufficient income to cover any necessary rehabilitation costs without requiring any provincial government assistance.

The main reason for the inability to estimate total private sector financial requirements for rehabilitation need is that there are no reliable data on the types of repairs required. It would be invalid to apply the O.H.R.P. average cost estimate of \$3,250 per unit since it only applies to a very specific segment of total rehabilitation activity, namely those households requiring government assistance. However, from the total number of units requiring rehabilitation, it is clear that a potentially large private market does exist.

F. Comparison with C.M.H.C.'s 1974 Survey of Housing Units (S.H.U.)

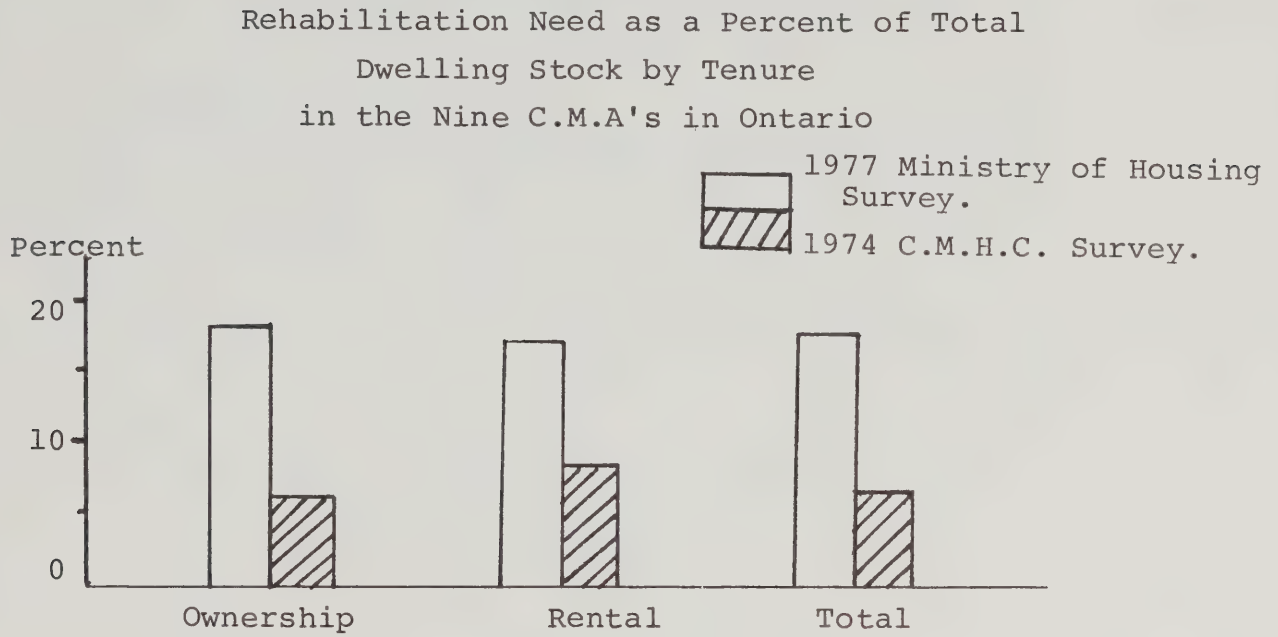
The 1974 Survey of Housing Units was a comprehensive assessment of existing dwelling stock and household characteristics in the census metropolitan areas.

While there was a major difficulty regarding a compatible definition of rehabilitation need, a comparison of results for the nine census metropolitan areas in Ontario from the two surveys provided material for some interesting hypotheses on the condition of existing stock in the census metropolitan areas.

The 1974 Survey categorized housing stock condition as being poor, fair or good, where poor represented the existence of at least one major disrepair characteristic or three or more minor ones (disrepair characteristics), fair represented no major but two minor and good represented no major and one or no minor disrepair characteristics. It was assumed that the combined total of units in poor and fair condition could be equated to the category of units in need of repair, as used in the 1977 Ministry of Housing Survey. An important point was that all the disrepair characteristics referred to in the 1974 Survey were concerned with exterior building condition only.

A comparison of the results from the two surveys are illustrated in Chart IV.6 below.

CHART IV.6



Source: 1974 C.M.H.C. Survey of Housing Units:
1977 Ministry of Housing Survey.

Even though there were difficulties in comparing the two surveys, the substantially higher percentage of total stock requiring repair shown by the 1977 Ministry of Housing Survey compared to the 1974 C.M.H.C. Survey, can be explained by a combination of the following hypotheses.

- There is a significant proportion of existing dwelling units that have internal disrepair characteristics e.g., poor wiring or plumbing, while having good exterior condition. Many older homes may fall in this category.

- An increase in the number of units requiring repair, particularly minor repairs could have occurred in the period 1974 to 1977.

The opposing tenure patterns in rehabilitation need shown by the two surveys tend to support the hypothesis that owners maintain the exterior condition of their units better than renters (as shown by the 1974 C.M.H.C. Survey) although the overall rehabilitation need is slightly greater in the ownership sector (as shown in the 1977 Ministry of Housing Survey).

Building Quality by Household Income Quintiles

The 1974 C.M.H.C. Survey identified the state of building quality according to household incomes. As can be seen from the tabulated findings in Table IV.3, there was

only a marginal difference between the top three quintiles. In contrast, the bottom two quintiles indicated a higher level of rehabilitation need compared to the other three quintiles especially in regard to ownership stock.

TABLE IV.3

Percent of Total Dwelling Stock
in Need of Repair by
Household Income Quintiles
Ontario

Household Income Quintiles	Ownership	Rental	Total Stock
1st (Lowest)	7.2	10.1	9.0
2nd	8.9	8.6	8.8
3rd	4.4	6.3	5.2
4th	5.1	8.5	6.2
5th (Highest)	5.5	5.8	5.6

Source: 1974 C.M.H.C. Survey of Housing Units.

V. Units Beyond Repair

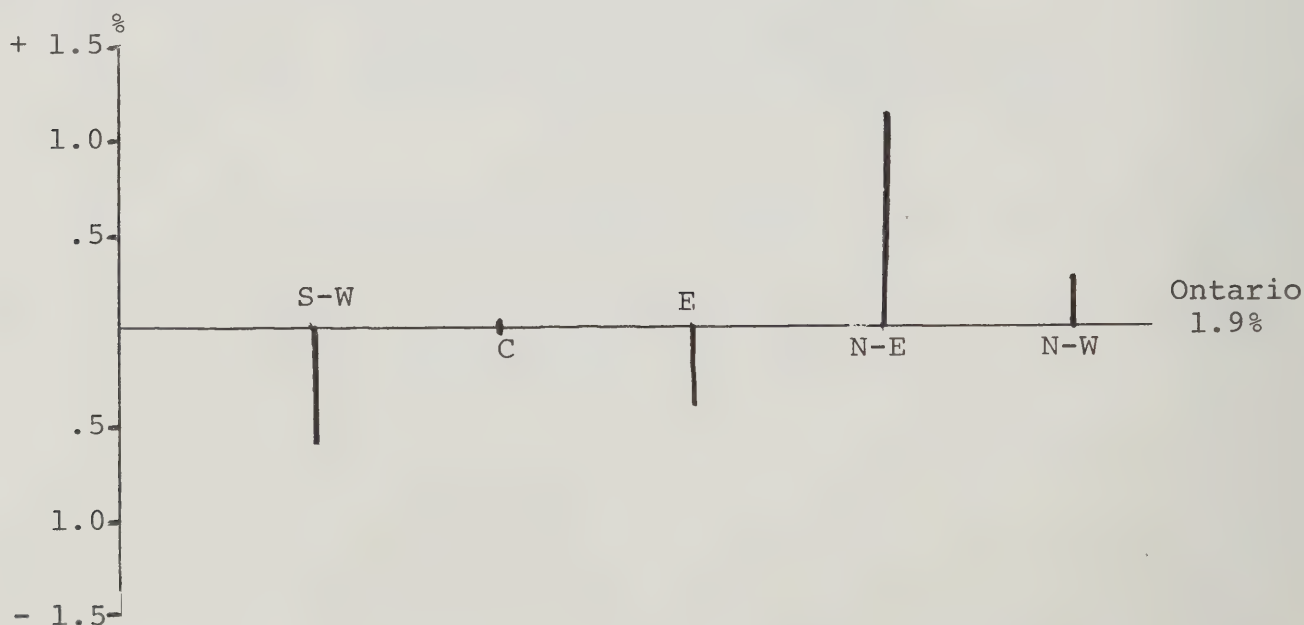
A. Total

The results obtained from the sample survey of municipalities indicated that almost 2.0 percent of the total dwelling stock in all Ontario needed demolition. As shown from chart V.1 below, the regions only differed marginally from the provincial percentage with the possible exception of the Northeastern Region.

CHART V.1

PERCENT OF TOTAL STOCK
BEYOND REPAIR BY REGION

Regional Variations from
the Provincial Level.



Source: Estimates prepared by P.P.D.S., Ministry of Housing. (Complete data see Appendix II, Table I.)

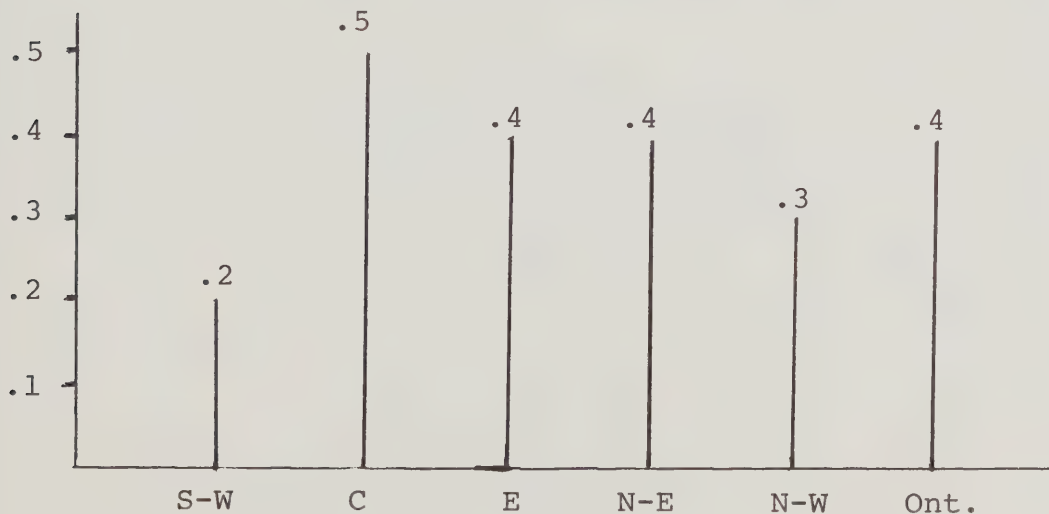
Note: The zero line represents the percentage of Ontario's dwelling stock beyond repair as of December 31, 1977; namely 1.9 percent.

B. Tenure Breakdown

As could be expected from the results of the data on rehabilitation need, it was estimated that a lower percentage of total rental stock was beyond repair than ownership stock in the case of all the regions, although there were no large differences existing in any of the regions, even in the Northeastern Region (see Table II.2). It was noticeable, however, that the ratio of rental to ownership units beyond repair were lower than the ratio in the case of rehabilitation need for all the regions except the Northeastern Region. These data are illustrated in chart V.2 below

CHART V.2

RATIO OF RENTAL TO OWNERSHIP UNITS BEYOND
REPAIR AS OF DECEMBER 31, 1977



Source: Estimates prepared by P.P.D.S., Ministry of Housing.

C. Population Size Cohorts

The percentage estimates of total dwelling stock beyond repair for the four selected population-size cohorts as shown in Table V.1, were calculated to be not statistically significant. This means that the percentage differences between them were not sufficiently large to say with any degree of reliability that they can be attributed to non-trivial causes. Thus, it can also be said that there were no significant differences in the tenure breakdown of units beyond repair for the four categories of municipalities.

TABLE V.1

PERCENT OF TOTAL DWELLING STOCK BEYOND REPAIR
BY TENURE AND POPULATION SIZE COHORTS
ONTARIO: AS OF DECEMBER 31, 1977

	Total Stock	Rental Stock	Ownership Stock
< 3,000	3.1	1.6	3.2
3,000- 9,999	2.4	2.0	2.4
10,000-49,999	1.6	2.3	2.2
50,000 +	1.1	1.0	1.2

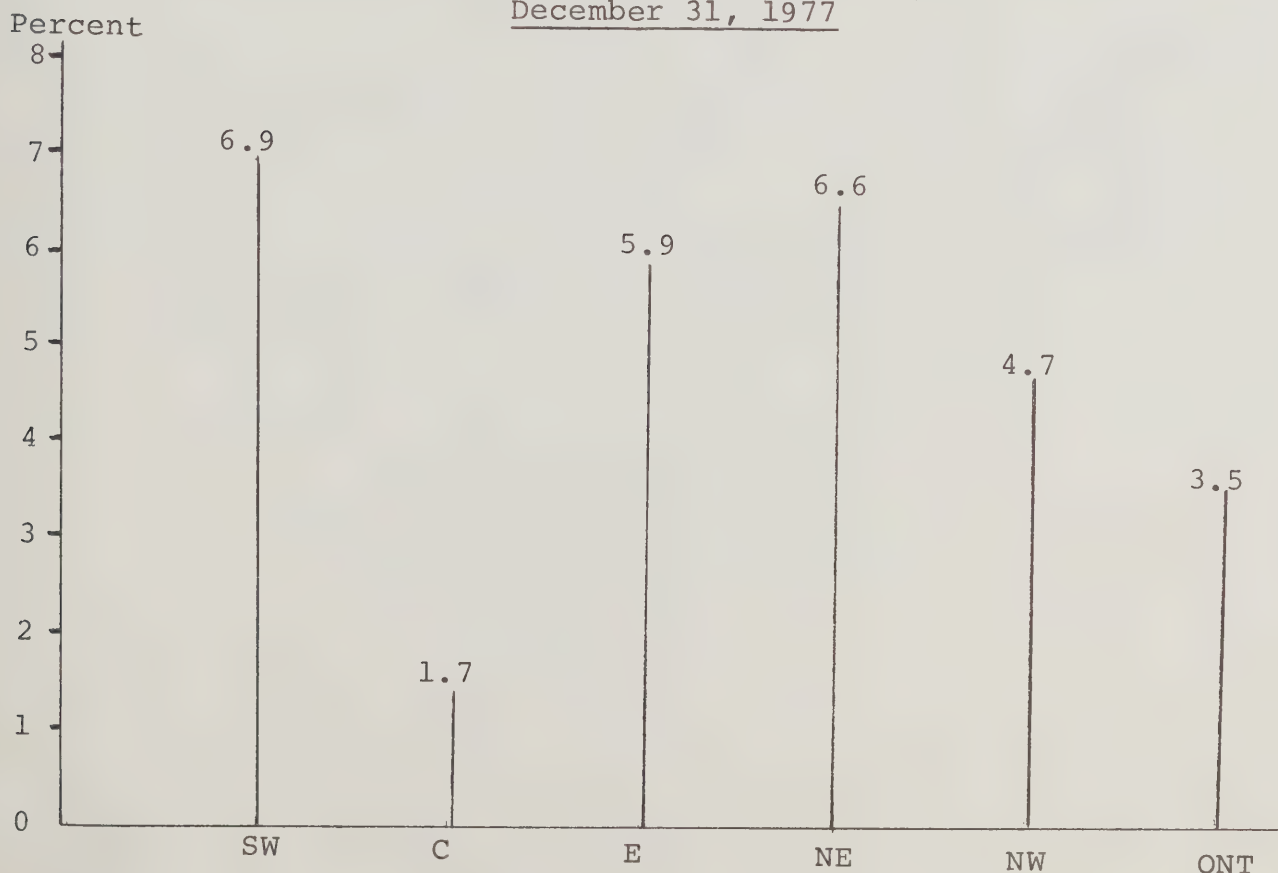
Source: Estimates prepared by P.P.D.S.,
Ministry of Housing.

SECTION VIRehabilitation ActivityA. Total Activity

The level of rehabilitation activity in 1977 taken as a percent of total dwelling stock requiring repair was roughly similar for all the regions except the Central Region, as illustrated in Chart VI.1 below. From this observation it may be deduced that the rate of rehabilitation activity in the major urban areas has not kept pace with that of the less densely populated municipalities.

Chart VI.1

Rehabilitation Activity in 1977 as a Percent of
Total Dwelling Stock as of
December 31, 1977

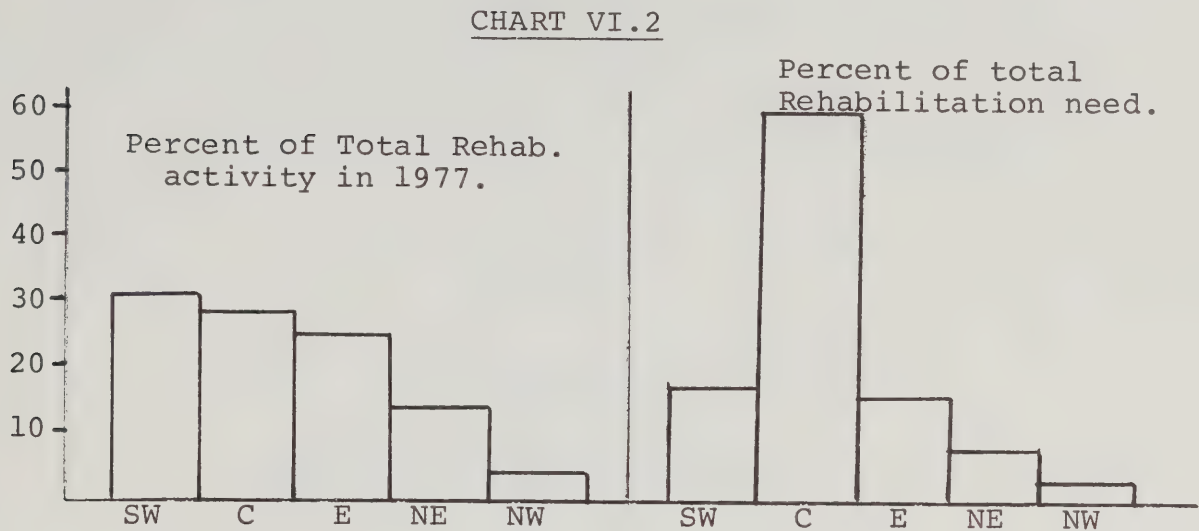


Source: Estimates prepared by P.P.D.S.
Ministry of Housing.

The percentages given in Chart VI.1 are also applicable to the regional breakdown of estimated total financial cost of rehabilitation activity in 1977. These estimates are provided in Appendix II, Table IV.

A clear indication of the relative lack of rehabilitation activity in the Central Region during 1977 compared to the other regions is provided in Chart VI.2.

A clear indication of the relative lack of rehabilitation activity in the Central Region during 1977 compared to the other regions is provided in Chart VI.2.



Source: Estimates prepared by PPDS, Ministry of Housing (See Appendix II Table V.).

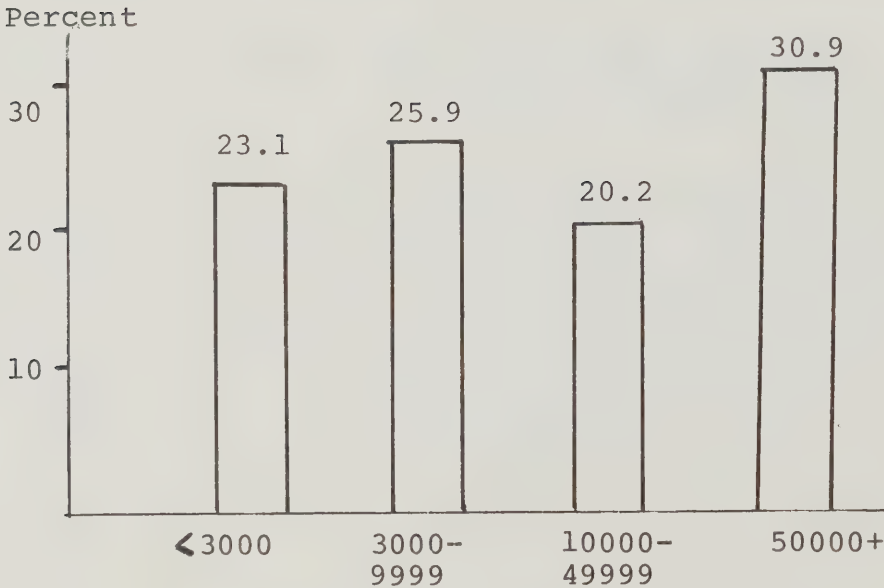
Due to insufficient sample data, a breakdown by tenure of rehabilitation activity in 1977 was not possible. However those municipalities that provided such data by tenure indicated a much larger proportion of ownership unit repairs compared to rental rehabilitation.

B. Municipality Strata by Population Size

The level of rehabilitation activity in 1977 was fairly uniform for all the selected strata as shown by Chart VI.3 below. This fact reinforces the observation made at the beginning of the section, that no special attention has been given to the greater total rehabilitation need of the larger sized municipalities.

CHART VI.3

Percent of Total Rehabilitation
Activity in 1977 by
Selected Municipality Strata



Source: Estimates prepared by P.P.D.S., Ministry of Housing. (See Appendix II Table V

APPENDIX I

Development and Implementation
Of a Small Size Sample Survey

APPENDIX I

Development and Implementation of A Small Size Sample Survey

Section I: Survey Details

Introduction

Following a sample test of eleven randomly selected municipalities, it was proven that a telephone coverage would be adequate without having recourse to explanatory letters of introduction to the survey municipalities. (This was substantiated later as there was a 100 percent response to the questionnaire.)

Coverage

Two hundred and fifteen municipalities were surveyed. One hundred and twenty of these municipalities were pre-selected in that Form I data were available for them from the files of the Community Renewal Branch (a copy of a Form I is attached at the end of this section.) The remaining ninety-five municipalities, were obtained by using the small sample size estimation procedure to determine the number of municipalities required within each population strata. A list of all the municipalities surveyed according to their population size strata is provided in Appendix I.2.

Questionnaire

The format of the questionnaire closely followed the information requested on the O.H.R.P. applications (Form I). The only modifications were an expansion of the questions to cover estimates for the tenure breakdown and insulation need. The questionnaire is attached as Appendix I.3.

The one hundred and twenty municipalities that had already provided Form I data were asked exactly the same questions as the remaining ninety-five municipalities, in order to:

- update information;
- ensure internal consistency of the sample data;
- obtain estimates on the tenure breakdown.
- ensure that estimates provided covered all households and were not limited to those eligible for O.H.R.P. Assistance.

Respondents

In the case of the municipalities with a population under 3,000, the respondent was the municipal clerk or treasurer. In the larger sized municipalities, the property standards officer or a planner provided the information. In all cases, the information was obtained from persons with an in-depth knowledge of the local area.

Follow-up calls were made to almost all the municipalities to allow them sufficient time to compile the required information.

Section II: Conversion of sample data to total
'population' estimates.

The main steps in this conversion process were as follows:

1. Calculation of the arithmetic mean and the standard deviation for each of the population strata within each region. Note that this could be done either for the percentages (of total stock) or for absolute numbers of the variables chosen.
2. A program was developed by Tom Garrison (Statistician, P.P.D.S., Ministry of Housing) which required the input of the arithmetic mean, the standard deviation, the number of sampled municipalities within each population strata.
3. The resulting output from the program gave the regional mean and the 95% confidence limit estimates resulting from the specialized (stratified) sample.
4. To produce the final 'population' estimate it was necessary to multiply the mean and the standard error by the total number of municipalities within the region.

An example of the four steps is provided below.

1&2. Program Input: Central Region: Rental Units in Need
of Repair.

<u>Population Strata</u>	<u>Total No. of Municip.</u>	<u>No. of Sample Municip.</u>	<u>Mean</u>	<u>Standard Deviation</u>
< 3,000	79	18	11.28	15.08
3,000- 9,999	55	15	51.73	68.02
10,000-49,999	49	17	319.29	411.47
50,000 +	20	20	6,309.75	13,945.79

3. Program Output

Mean = 717.13

Standard Error = \pm 39.05

4. Total Regional Estimate

Total Number of Municipalities in the region = 203.

Rental Rehabilitation Need = $203 \times 717.13 = 145,577$

95% Confidence Limit = $203 \times \pm 39.05 = \pm 7,927 + 145,577 = 137,650 \text{ to } 153,502.$

Municipal Application For Grant *

Form 1

APPENDIX I.1

/licate

O H R P

Geographic Code (Assessment)			
County Region		Municipality	

hereby applies for a Provincial Grant for the purpose of making loans to owners of real property used for residential purposes to assist in the repair, rehabilitation, and improvement of dwelling units pursuant to the Housing Development Act and the Regulations and subject to the limitations thereof.

Name of Municipality

Provincial Grant Amount

19 to 19

Fiscal Year

Population as shown in the current year Municipal directory prepared by the Ministry of Treasury Economics & Intergovernmental Affairs

Population of Municipality

Amount of money requested pursuant to Schedule 1 of The Regulation

\$

The Corporation also applies for an accountable advance, and agrees to account for this amount for further payments through the submission of quarterly activity reports.

Accountable Advance

Estimated Housing Conditions (Municipal)
as per OHRP Regulations

Rehabilitation	% of Units
Required	
Not Required	
Beyond Repair	
Total Number of Units in Municipality	

Income Range Distribution of Households (Municipal)

Range \$	%	Range \$	%
0 - 4,999		10,000 - 14,999	
5,000 - 6,999		15,000 - 19,999	
7,000 - 9,999		20,000 +	
Average Household Income			
Total Number of Households			

The Corporation agrees to comply with the Housing Development Act and the Regulations of this program.

Clerk of the Municipality or other
person authorized to sign this application

Approved

For Ministry of Housing

Day	Mon	Year
-----	-----	------

Application Date

Day	Mon	Year
-----	-----	------

Approval Date

Note: Attach hereto the copies of all the documents required to be forwarded by the Municipality pursuant to Subsection 1 of Section 2 of this regulation.

APPENDIX I.2

List of Municipalities Surveyed by
Population Size, Strata, and Regions

SOUTH-WESTERN REGION

<u>Under 3,000 Pop.</u>		<u>3,000-9,999 Pop.</u>		<u>10,000-49,999 Pop.</u>	
<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>
1. Blyth	v	1. Amherstburg	t	1. Chatham	c
2. Carrick	twp	2. Aylmer	t	2. Leamington	t
3. Christie	"	3. Blandford-		3. Owen Sound	c
4. Clinton	t	Blenheim	twp	4. St. Thomas	c
5. Dresden	"	4. Bosanquet	"	5. Sandwich W.	twp
6. Euphrasia	twp	5. Caradoc	"	6. Sarnia	"
7. Erie Beach	v	6. Chatham	"	7. Wallaceburg	t
8. Grenock	twp	7. Goderich	t	8. Woodstock	c
9. Hullett	"	8. Harwich	twp		
10. Hay	twp	9. Ingersoll	t		
11. Hensall	v	10. Listowel	"		
12. Markdale	v	11. London	twp		
13. Port Burwell	v	12. Moore	"		
14. Proton	twp	13. N. Dorchester	"		
15. Romney	"	14. Norwich	"		
16. Thornbury	t	15. Port Elgin	t		
17. Wheatley	v	16. Rochester	twp		
18. Lions's Head	twp	17. Sombra	"		
19. Kappel	"	18. S.W. Oxford	"		
20. Sarawak	"	19. Strathroy	t		
		20. Tecumseh	"		
		21. Tilbury	"		
		22. Tillsonburg	"		
		23. Westminster	twp		
		24. Yarmouth	"		
		25. Zorra	"		

CENTRAL REGION

<u>Under 3,000 Pop.</u>		<u>3,000-9,999 Pop.</u>		<u>50,000+ Pop.</u>	
<u>Municipality</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>
1. Amaranth	twp	1. Brantford	twp	1. Brampton	c
2. Arthur	"	2. Brock	"	2. Brantford	c
3. Bicroft	Im.Dist	3. Campbellford	c	3. Burlington	c
4. Burleigh & Anstruther	twp	4. Douro	twp	4. Cambridge	c
5. Barrie Is.	"	5. Hamilton	"	5. E. York	bor
6. Cardiff	"	6. Mt. Forest	t	6. Etobicoke	"
7. Elmvale	v	7. N. Dumfries	twp	7. Guelph	c
8. E. Garafaxa	twp	8. Peel	"	8. Haldimand-Norfolk	Reg Mu
9. Fenelon Falls	v	9. Tay	"	9. Hamilton	c
10. Flos	twp	10. Tiny	"	10. Kitchener	c
11. Havelock	v	11. Wainfleet	"	11. Mississauga	c
12. Monmouth	twp	12. W. Gwillimbury	"	12. Niagara Falls	c
13. Port McNicoll	v	13. Hope	"	13. N. York	bor
14. Rama	twp	14. Pelham	t	14. Oakville	t
15. S. Monaghan	"	15. Gravenhurst	"	15. Oshawa	c
16. Stanhope	"			16. Peterborough	c
17. Sunnidale	"			17. St. Catharines	c
18. Verulam	"			18. Scarborough	bor
				19. Toronto	c
				20. York	bor

10,000-49,999 Pop.

<u>Mun.</u>	<u>Status</u>
1. Ajax	t
2. Ancaster	t
3. Barrie	c
4. Caledon	t
5. Collingwood	t
6. Georgina	twp
7. Huntsville	t
8. Innisfil	twp
9. Pickering	t
10. Port Colborne	c
11. Richmond Hill	t
12. Stoney Creek	t
13. Thorold	t
14. Uxbridge	twp
15. Vaughan	t
16. Welland	t
17. Whitby	t

EASTERN REGION

<u>Under 3,000 Pop.</u>			<u>3,000-9,999 Pop.</u>			<u>10,000-49,999 Pop.</u>		
<u>Mun.</u>	<u>Status</u>		<u>Mun.</u>	<u>Status</u>		<u>Mun.</u>	<u>Status</u>	
1. Admaston	twp		1. Ameliasburgh	twp		1. Belleville	c	
2. Alfred	"		2. Arnprior	t		2. Cornwall	c	
3. Bancroft	v		3. Carleton Pl.	t		3. Pembroke	c	
4. Barry's Bay	v		4. Clarence	twp		4. Trenton	t	
5. Bastard & S. Burgess	twp		5. Deep River	t		5. Vanier	c	
6. Bath	v		6. Elizabethtown	twp				
7. Brougham	twp		7. Gananoque	t				
8. Cardinal	v		8. Hawkesbury	t				
9. Finch	v		9. Napanee	t				
10. Grattan	v		10. Osgoode	twp				
11. Head, Clara & Maria	twp		11. Perth	t				
12. Hungerford	"		12. Petawawa	twp				
13. Lanark	v		13. Renfrew	t		1. Gloucester	twp	
14. L'Original	v		14. Rockland	t		2. Kingston	c	
15. Madoc	v		15. Russell	twp		3. Nepean	twp	
16. Marmora	v		16. Smiths Falls	t		4. Ottawa	c	
17. Monteagle	twp							
18. Rolph & Buchanan	"							
19. Ross	"							
20. S. Crosby	"							
21. S. Sherbrooke	"							
22. Tyendinaga	"							
23. Wilberforce	"							
24. Winchester	v							

50,000+ Pop.

<u>Mun.</u>	<u>Status</u>
1. Gloucester	twp
2. Kingston	c
3. Nepean	twp
4. Ottawa	c

NORTH-EASTERN REGION

<u>Under 3,000 Pop.</u>		<u>3,000-9,999 Pop.</u>		<u>10,000-49,999 Pop.</u>	
<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>
1. Armstrong	twp	1. Blind River	t	1. Kapuskasing	c
2. Chamberlain	"	2. Elliot Lake	t	2. Kirkland Lk.	t
3. Day & Bright	"	3. Hawkesbury	t	3. Timmins	c
4. Foley	"	4. Iroquois Falls	t		
5. Humphrey	"	5. Sturgeon Falls	t		
6. James	"				
7. Kerros	"				
8. Larder Lake	"				
9. Little					
Current	t				
10. Magnetawan	t				
11. Massey	t				
12. Mc Murrich	twp				
13. Perry	"				
14. S. River	"				
15. Sundridge	v				
16. Thessalon	twp				

50,000+ Pop.

Status

1. North Bay	c
2. Sault St. Marie	c
3. Sudbury	c

NORTH-WESTERN REGION

<u>Under 3,000 Pop.</u>		<u>3,000-9,999 Pop.</u>		<u>10,000-49,999 Pop.</u>	
<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>	<u>Mun.</u>	<u>Status</u>
1. Atwood	twp	1. Atikokan	twp	1. Kenora	t
2. Conmee	"	2. Dryden	t		
3. Dilke	"	3. Fort Frances	t		
4. Emo	"				
5. Keewatin	t				
6. Kingsford	Im Dis				
7. Nakina	"				
8. Nipigon	twp				

50,000+ Pop.

Mun. Status

1. Thunder Bay	c
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REHABILITATION NEED QUESTIONNAIRE

Municipality: _____

County: _____

Region: _____

Population: _____

Tel. No.: _____

Person: _____

Position: _____

Calls: 1st Date: _____

2nd Date: _____

Duration: _____ mins.

Duration: _____ mins.

3rd Date: _____

4th Date: _____

Duration: _____ mins.

Duration: _____ mins.

Questions	Responses	Comments
1. What are the total number of residential units in the municipality, and what is the ownership/rental breakdown as of December 31, 1977? (Percentage estimate will be useful if actuals aren't available.)	Total _____ units Ownership _____ units Rental _____ units % %	
2. What is the percentage distribution of total units according to these categories?	Require repair _____ units % Beyond repair _____ units %	

<u>Questions</u>	<u>Responses</u>	<u>Comments</u>
3. Are data available for the total number of rental units for the same categories as shown in Question 2?	Require repair _____ units % Beyond repair _____ units %	
4. Are there any estimates for the total number of rehabbed units for 1977 and, if possible, according to an ownership/rental breakdown?	Rehabbed Units: Total _____ units Ownership _____ units % Rental _____ units %	
5. What percentage of units requiring repair have inadequate insulation?	Insulation Need _____ %	

APPENDIX II

Background Data

APPENDIX II

Background Data

The attached tables contain the estimated data on rehabilitation need and activity, derived from the application of the procedures outlined in Appendix I.

The total dwelling stock data for the regions and the province were derived by using 1976 Census data and adding the total number of dwelling completions by tenure in the period July 1, 1976 to December 31, 1977.

The data provided are as follows:

- Table I: Total Rehabilitation Need By Region as of December 31, 1977.
- Table II: Rehabilitation Need By Tenure and Region as of December 31, 1977.
- Table III: Rehabilitation Activity in 1977 By Region.
- Table IV: Comparison of Rehabilitation Need and Activity By Region.
- Table V: Rehabilitation Activity by Population Size of Municipalities.

APPENDIX II - TABLE I

TOTAL REHABILITATION NEED

BY REGION AS OF DECEMBER 31, 1977

Region	Dwelling Stock	Units in Need of Rehabilitation		Units Beyond Repair	
		Percent of Stock	No. of Units	Percent of Stock	No. of Units
Southwestern	421,169	25.3	106,560	1.3	5,566
Central	1,704,229	23.1	393,204	1.9	33,031
Eastern	387,241	24.3	94,212	1.5	5,817
Northeastern	179,471	25.6	45,964	3.1	5,575
Northwestern	73,189	23.2	17,000	2.2	1,578
Total Ontario	2,765,299	23.8	656,940	1.9	51,566

Source: Estimates prepared by P.P.D.S., Ministry of Housing.

REHABILITATION NEED BY TENURE
AND REGION AS OF DECEMBER 31, 1977

UNITS IN NEED OF REHABILITATION UNITS BEYOND REPAIR				
REGIONS	UNITS	% OF TOTAL	UNITS	% OF TOTAL
SOUTHWESTERN				
Ownership	77,971	73.2	4,664	83.8
Rental	28,589	26.8	902	16.2
Total	106,560	100.0	5,566	100.0
CENTRAL				
Ownership	247,627	63.0	22,355	67.7
Rental	145,577	37.0	10,676	32.3
Total	393,204	100.0	33,031	100.0
EASTERN				
Ownership	63,454	67.4	4,271	73.4
Rental	30,758	32.6	1,546	26.6
Total	94,212	100.0	5,817	100.0
NORTHEASTERN				
Ownership	33,972	73.9	3,946	70.8
Rental	11,992	26.1	1,630	29.2
Total	45,964	100.0	5,575	100.0
NORTHWESTERN				
Ownership	12,810	75.4	1,224	77.6
Rental	4,190	24.6	354	22.4
Total	17,000	100.0	1,578	100.0
TOTAL ONTARIO				
Ownership	435,835	66.3	36,460	70.7
Rental	221,105	33.7	15,106	29.3
Total	656,940	100.0	51,566	100.0

Source: Estimates prepared by P.P.D.S., Ministry of Housing

APPENDIX II TABLE III

Rehabilitation Activity in 1977 by
Region and the Province of Ontario

Regions	As of Dec. 31/77 Number of Units Needing Repair	Rehabilitation Activity in 1977	Rehabilitation Activity as a Percent of Need
	Units	Units	%
South-Western	106,560	4,319	6.87
Central	393,204	6,491	1.65
Eastern	94,212	5,600	5.94
North-Eastern	45,965	3,021	6.57
North-Western	17,000	794	4.67
Ontario	656,940	23,225	3.54

Source: Estimates prepared by P.P.D.S.,
Ministry of Housing.

APPENDIX II TABLE IV.

Comparison of Rehabilitation Need and Activity by Region

Regions and Ontario	Rehabilitation Activity in 1977	Percent of Total Activity in 1977	Units in need of Repair as of December 31, 1977	Percent of Total Need
	Units	%	Units	%
South-Western	7,319	31.5	106,560	16.2
Central	6,491	28.0	393,204	59.8
Eastern	5,600	24.1	94,212	14.4
North Eastern	3,021	13.0	45,965	7.0
North Western	794	3.4	17,000	2.6
Ontario	23,225	100.0	656,940	100.0

Source: Estimates prepared by P.P.D.S., Ministry of Housing

APPENDIX II: TABLE V

Rehabilitation Activity by Population
Size of Municipalities

Municipality Strata by Population Size	Rehabilitation Activity in 1977	Percent of Total Rehab. Activity in 1977
	Units	%
< 3,000	5,355	23.1
3,000 - 9,999	6,006	25.9
10,000 - 49,999	4,685	20.2
50,000+	7,179	30.9
TOTAL	23,225	100.0

Source: Estimates prepared by P.P.D.S., Ministry of
Housing.

